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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,783	05/24/2001	Indra Laksono	VIXS 006	8015
34280 7590 07/06/2007 TIMOTHY W. MARKISON VIXS, INC. P.O.BOX 160727 AUSTIN, TX 78736			EXAMINER BROWN, RUEBEN M	
			ART UNIT 2623	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/864,783

Applicant(s)

LAKSONO, INDRA

Examiner

Reuben M. Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-74 is/are pending in the application.
- 4a) Of the above claim(s) 16-33 and 57-74 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-15 & 34-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION***Response to Arguments***

1. Applicant's arguments filed 12/18/2006 have been fully considered but they are not persuasive. Applicant's argument as found on pages 30, 31 & 32, is that Hylton does not read on the amended claims 1 & 34, because the shared processing system 10 of Hylton is not a client device, as set forth in claims 1 & 34. In particular, it is argued that the operation of the controller 19, within the shared processing system 10, which includes elements of interpreting segments of the stream of data to identify data of the channel of interest and interpreting the data of the channel of interest to determine the type of the data, is not included within a client device. It is also argued on page 32 that, "claim 42, as amended refers to an apparatus used in a client/server configuration".

2. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., 'a client device' or 'client/server configuration') is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). It is noted that claims neither 1-15, nor 42-56, recite limitations with respect a 'client', 'client/server' or 'client device'. Claim 34 recites a 'client module', which is broader than a 'client device', emphasis added, since a module is a more generic term.

Secondly, it is noted that the claimed, 'client module' is not necessarily limited to a STB. In other words, the shared processing system 10 of Hylton represents a module at a client premises, and would still meet the claimed 'client module'.

Notwithstanding the above discussion, in the rejection, examiner is pointing to the set top terminal 100, which includes a Transport Interface Module (TIM 110), and which corresponds directly with the claimed 'client module', as found in the specification page 21-22. In particular, the TIM 110 reads on the 'network interface controller', see Fig. 5; col. 18, lines 24-67; whereas the set top terminal 100 also includes a 'video decoder' (MPEG decoder 129) and 'rendering module' (NTSC encoder 137), see Fig. 4.

Regarding applicant's request for evidence to support the Official Notice, the references are provided.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1-3, 10-14, 34-37, 42-44, & 51-55 are rejected under 35 U.S.C. 102(b) as being anticipated by Hylton, (U.S. Pat # 5,708,961)

Considering claims 1 & 42, Hylton teaches a system wherein a shared processing system 10, receives, then transmits to the STT 100 a plurality of TV channels from which the user is enabled to choose a particular desired channel. The claimed, 'method for isolating a channel of interest from a set of channels in a multimedia system, comprising; 'receiving the set of channels as a stream of data', corresponds with receiving the requested programming at each STT 100, see Fig. 1; Fig. 4; col. 4, lines 55-67; col. 6, lines 15-40.

'interpreting segments of the stream of data to identify data of the channel of interest', 'interpreting the data of the channel of interest to determine the type of data' is met by the disclosure in Hylton, col. 8, lines 35-40; col. 9, lines 1-30 & col. 11, lines 15-35, which discloses that when a subscriber makes selection of a particular program, that the DET 102 compiles message identifying the program, which then selects the appropriate program by channel mapping, using packet identifiers.

'providing the processed data for display' is met by Hylton providing decompressed data to a TV 103, via the TIM 101 & DET 102, see Fig. 1.

Considering claims 2-3 & 43-44, Hylton is directed to receiving a plurality of MPEG transport streams, which inherently include packet data with header and payload portions, such

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that the header portion contains data of the channel of interest, see col. 11, lines 9-40; col. 12, lines 15-42.

Considering claims 10-11 & 51-52, the claimed application data being stored in memory is broad enough to read on the disclosure in Hylton of storing frames of data in a Video RAM 135, and then retrieving and displaying the frames of data on the DET 102, see col. 15, lines 1-60.

Considering claims 12 & 53 the MPEG data stream in Hylton includes frame headers and frame payload, and interpreting the frame header to determinate data of the channel of interests, see col. 11, lines 22-35, which discusses that a variety of information including header, are used to reconstruct frames of data. Also see col. 33, lines 15-35, which discloses the PLCP framing structure.

Considering claims 13 & 54, see Hylton, col. 8, lines 35-50.

Considering claims 14 & 55, Hylton decoder 129, decodes the received MPEG video stream.

Considering claim 34, the claimed client module for use in a multimedia system, which comprises: 'a network interface controller operably coupled to receive encoded channel data that represents a set of channels via a communication path from the multimedia server, such that the

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NIC extracts data relating to a channel of interest from the encoded channel data', is met by the operation of the STT 100, previously discussed above with respect claims 1 & 42, col. 6, lines 5-17; col. 9, lines 8-25. The NIC corresponds with the operation of the TIM 101, col. 14, lines 1-30. The claimed 'multimedia server', corresponds with the shared processing system 10.

'video decoder to decode the data relating to the channel of interest to produce decoded data', is met by the operation of the video decoder 129, see col. 9, lines 1-25 & col. 14, lines 30-67 thru col. 15, lines 1-35; Fig. 4.

'memory operably coupled to store the decoded video data', reads on the video RAM 135, Fig. 4; col. 15, lines 1-15.

'rendering module' reads on the encoder 137, (Fig. 4; col. 16, lines 8-20).

Considering claims 35-36, see col. 14, lines 20-67, which discloses the TV 103.

Considering claim 37, the NIC reads on the TIM 101 of Hylton, see col. 8, lines 1-45.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4-5 & 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton, in view of Mills, (U.S. Pat # 6,311,204).

Considering claims 4-5 & 45-46, Hylton teaches that the received MPEG data is processed before being displayed, but does not disclose the feature of converting YUV data and RGB data. Nevertheless Mills, which is in the same field of endeavor, teaches a decoder system that receives MPEG video data (col. 9, lines 35-55) and converts RGB data to YUV data, col. 13, lines 30-55. It would have been obvious for one ordinary skill in the art at the time the invention was made, to modify Hylton with the feature of converting RGB to YUV data, at least for the purpose of enabling a particular interpolation and blending process, as taught by Mills, col. 2, lines 18-40.

7. Claims 6-7 & 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton & Mills as applied to claim 4 above, and further in view of Leone, (U.S. Pat # 6,901,153).

Considering claims 6 & 47, Hylton & Mills do not discuss the claimed feature of 'Huffman decoding' or 'de-zigzagging the Huffman decoded data to produce the de-zz data' and 'de-quantizing the de-zz data to produce de-Q data'. However, Leone which is in the same field of endeavor of decoding compressed MPEG data, teaches Huffman decoded video data, which is de-zigzagged and de-quantized, see col. 2, lines 25-36. It would have been obvious for one

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ordinary skill in the art at the time the invention was made, to modify Hylton with the feature of Huffman decoding, de-zigzagging and de-quantizing video data, for the improvement of providing a more precisely processed video stream, as taught by Leone. Leone specifically teaches that de-quantizing the data and de-zigzagging the data, removes the diagonal pixel ordering used by the MPEG to improve the run length processing.

Leone also teaches the claimed, 'performing IDCT upon the de-Q data' and 'motion compensation and scaling', see col. 2, lines 30-38 & col. 2, lines 60-67.

Considering claims 7 & 48, Leone teaches converting the YUV to RGB data, see col. 2, lines 50-67.

8. Claims 8-9 & 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton as applied to claims 3 & 44 above, and further in view of Sueyoshi, (U.S. Pat # 6,295,319).

Considering claims 8-9 & 49-50, even though Hylton teaches determining the type of data, such as audio or video, by looking at the PID, the reference does not discuss converting the audio into PCM. Nevertheless, Sueyoshi teaches converting the audio MPEG data in to PCM and holding in a buffer, see col. 4, lines 55-61; col. 5, lines 6-15 & col. 7, lines 37-67. It would have been obvious for one ordinary skill in the art at the time the invention was made, to modify Hylton with the feature of converting audio data to PCM as taught by Sueyoshi, for the desirable

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improvement of a standard audio decoding algorithm that provides and enhanced sound production.

9. Claims 15 & 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton, in view of Tsuge, (U.S. Pat # 5,995,709).

Considering claims 15 & 56, even though Hylton teaches decoding a video stream, the reference does not teach specifics of at least one of: multilevel coding/decoding, non-return-to-zero coding/decoding, block coding/decoding, and nB/m coding/decoding of data streams. However Tsuge, which is in the same field of endeavor, provides a teaching of non-return to zero (NRZ) conversion, Abstract; col. 7, lines 41-67 thru col. 8, lines 1-21. Tsuge is particularly compatible with the STB 100 of Hylton, which includes an MPEG demux 127 and decoders 129,131 (Fig. 4) for decoding an MPEG stream; since Tsuge is also directed to decoding data included in an MPEG data stream, (NRZ modulated pixel data, which may contain closed caption data), see col. 2, lines 1-25. It would have been obvious for one ordinary skill in the art at the time the invention was made, to modify Hylton with the features of non-return to zero coding/decoding, at least for the desirable advantage of transmitting text code as NRZ modulated signals, as taught Tsuge, col. 1, lines 15-55.

10. Claims 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton, in view of Chimoto, (U.S. Pat # 5,838,383).

Considering claims 38 & 39, Hylton does not discuss a microphone or video camera, local to the user DET system 102. Nevertheless, Chimoto discloses a local entertainment system that includes a video camera 435 & microphone 437, (Fig. 4; col. 15, lines 30-32; col. 21, lines 21-28). It would have been obvious for one ordinary skill in the art at the time the invention was made, to modify Hylton with the well-known technology of a local video camera and microphone, as taught by Chimoto, at least for the desirable benefit of providing the user with the option of two-way video communication, such as in a video conference, using the entertainment equipment already provided.

Chimoto discloses A/D converter sections 434, 436 for converting the inputs from camera 435 & microphone 437, in to digital signals; see col. 15, lines 30-38.

11. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton, in view of Arai, (U.S. Pat # 7,068,677).

Considering claim 40, Hylton does not transmitting packets in the wireless network using CSMA technology. Nevertheless, Arai is directed to a radio LAN that uses CSMA technology, Abstract; col. 2, lines 50-61. Arai goes on teach transmitting IP packets in the system and using the CSMA technology, see col. 5, lines 22-35. It would have been obvious for one ordinary skill in the art at the time the invention was made, to modify Hylton with the technique of CSMA for detecting LAN data, including IP data, as taught by Arai, for the benefit of using the known

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reliability of CSMA over a radio LAN system, overcoming the problem using a radio LAN over long distance, see col. 1, lines 49-67 thru col. 2, lines 1-20.

12. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton, in view of Leone.

Considering claim 41, Hylton does not discuss the claimed feature of 'Huffman decoding' or 'de-zigzagging the Huffman decoded data to produce the de-zz data' and 'de-quantizing the de-zz data to produce de-Q data'. However, Leone which is in the same field of endeavor of decoding compressed MPEG data, teaches Huffman decoded video data, which is de-zigzagged and de-quantized, see col. 2, lines 25-36. It would have been obvious for one ordinary skill in the art at the time the invention was made, to modify Hylton with the feature of Huffman decoding, de-zigzagging and de-quantizing video data, for the improvement of providing a more precisely processed video stream, as taught by Leone. Leone specifically teaches that de-quantizing the data and de-zigzagging the data, removes the diagonal pixel ordering used by the MPEG to improve the run length processing.

Leone also teaches the claimed, 'performing IDCT upon the de-Q data' and 'motion compensation and scaling', see col. 2, lines 30-38 & col. 2, lines 60-67.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- A) Rakib Teaches using CSMA over a wireless LAN, transmitting IP packets.
- B) Allen Teaches a local system that includes a camera & microphone.
- C) Halsall Communications textbook, which teaches aspects of NRZ, Manchester, multilevel coding, frame synchronization and CSMA technology in wired & wireless LAN.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any response to this action should be mailed to:

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or faxed to:

(571) 273-8300, (for formal communications intended for entry)

Or:

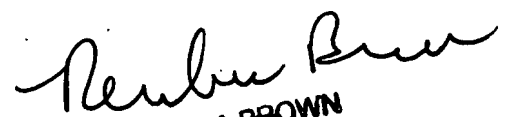
(571) 273-7290 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown M. Brown whose telephone number is (571) 272-7290. The examiner can normally be reached on M-F(8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communications and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Reuben M. Brown


REUBEN M. BROWN
PATENT EXAMINER